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FORM PTO-1449  
(REV. 7-80)U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICE

ATTY. DOCKET NO.: 464.1001

SERIAL NO.: 09/448,420

## LIST OF PRIOR ART CITED BY APPLICANT

(Use several sheets if necessary)

APPLICANT(S): SEUL, Michael and EBRIGHT, Richard

FILING DATE: November 23, 1999

GROUP: 1648

## U.S. PATENT DOCUMENTS

*EXAMINER INITIAL		DOCUMENT NUMBER							DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
PP	AA	4	4	9	9	0	5	2	2/12/85	Fulwyler	422	52	8/30/82
	AB	4	6	4	7	5	4	4	3/3/87	Nicoli et al.	436	518	6/25/85
	AC	4	8	2	2	7	4	6	4/18/89	Walt	436	528	6/25/86
	AD	4	9	9	4	3	7	3	2/19/91	Stavrianopoulos et al.	435	6	7/20/89
	AE	5	0	0	2	8	6	7	3/26/91	Macevitz	435	6	10/24/88
	AF	5	0	2	8	5	4	5	7/2/91	Soini	436	501	6/9/88
	AG	5	1	0	5	3	0	5	4/14/92	Betzig	359	368	1/10/91
	AH	5	1	1	4	8	6	4	5/19/92	Walt	436	528	9/19/89
	AI	5	1	3	2	2	4	2	7/21/92	Cheung	436	501	11/13/89
	AJ	5	1	3	2	0	9	7	7/21/92	Van Deusen et al.	422	82.09	9/4/90
	AK	5	1	4	3	8	5	3	9/1/92	Walt	436	501	2/2/89

## FOREIGN PATENT DOCUMENTS

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PP	AL	0	2	6	9	7	6	4	6/8/88	EPO	C12Q	1/68		X
	AM	0	4	7	8	3	1	9	4/1/92	EPO	C12Q	1/68		X
	AN	0	7	2	3	1	4	6	7/24/96	EPO	G01N	21/64		X
	AO	8	9	1	1	1	0	1	11/16/89	ACT WLPO	G01N	33/546		X
	AP	9	3	0	2	3	6	0	2/4/93	PCT WLPO	G01N	33/536		X

## OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

PP	AQ	Peterson, et al. "Fiber optic pH probe for physiological use," Anal. Chem. Vol. 52, 864-869 (1980)
PP	AR	Peterson, et al. "Fiber-Optic Sensors for Biomedical Applications," Science, 13: 123-127 (1984).
PP	AS.	Fuh, et al., "Single Fibre Optic Fluorescence pH Probe," Analyst, 112: 1159-1163 (1987).

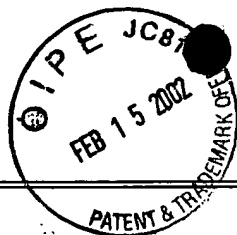
EXAMINER

P. Ponnaluri

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PP	BA	5	1	9	4	3	0	0		3/16/93	Cheung	427	213.31	11/8/89
	BB	5	2	4	4	8	1	3		9/14/93	Walt et al.	436	172	4/20/92
	BC	5	2	4	4	6	3	6		9/14/93	Walt et al.	422	82.07	1/25/91
	BD	5	2	5	0	2	6	4		10/5/93	Walt et al.	422	82.07	12/21/92
	BE	5	2	5	2	4	9	4		10/12/93	Walt	436	528	3/30/92
	BF	5	2	5	4	4	7	7		10/19/93	Walt	436	172	9/19/91
	BG	5	2	9	8	7	4	1		3/29/94	Walt et al.	250	227.23	1/13/93
	BH	5	3	0	6	6	1	8		4/26/94	Prober et al.	435	6	1/16/92
	BI	5	3	2	0	8	1	4		6/14/94	Walt et al.	422	82.07	11/25/92
	BJ	5	3	6	2	6	5	3		11/8/94	Carr et al.	436	165	5/6/92
	BK	5	4	0	5	7	8	4		4/11/95	Van Hoegaerden	436	523	2/25/93

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		DOCUMENT NUMBER							DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION		
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PP	BL	9	3	0	6	1	2	1	4/1/93	PCT WIPD	C07H	21/00		X	
PP	BM	9	3	2	4	5	1	7	12/9/93	PCT WIPD	C07K	_____		X	
PP	BN	9	7	1	4	0	2	8	4/17/97	PCT WIPD	G01N	15/10		X	
<del>PP</del>	BO														
	BP														

## OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

PP	BQ	Barnard, et al., "A fibre-optic chemical sensor with discrete sensing sites," Nature, vol. 353: 338-340 (1991).
	BR	Campion, et al. "Colored and Fluorescent Solid Supports," Innovation and Perspectives in Solid-Phase Synthesis . Ed: E. Birmingham (Mayflower, London), pp. 469-472 (1994).
	BS	Pope, "Fiber optic chemical microsensors employing optically active silica microspheres," SPIE, vol. 2388 : 245-256 (1995).

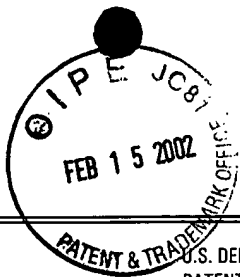
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PP	CA	5	4	8	0	7	2	3		1/2/96	Klainer et al.	428	441	5/17/94
	CB	5	8	1	4	5	2	4		9/29/98	Walt et al.	436	518	12/14/95
	CC	5	4	9	6	9	9	7		3/5/96	Pope	250	227.21	1/3/94
	CD	5	5	1	2	4	9	0		4/30/96	Walt et al.	436	171	8/11/94
	CE	5	5	6	5	3	2	4		10/15/96	Still et al.	435	6	4/13/94
	CF	5	5	6	7	6	2	7		10/22/96	Lehnen	436	518	11/5/93
	CG	5	6	3	3	7	2	4		5/27/97	King et al.	356	445	8/29/95
	CH	5	6	3	3	9	7	2		5/27/97	Walt et al.	385	116	11/29/95
	CI	5	6	5	0	4	8	9		7/22/97	Lam et al.	530	334	6/19/91
	CJ	5	6	5	2	0	5	9		7/29/97	Margel	428	403	1/25/95
	CK	5	6	7	4	6	9	8		10/7/97	Zarling et al.	435	7.92	3/30/95

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	CM														
	CN														
	CO														
	CP														

## OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

PP	CQ	Grazia et al., "In-vivo biomedical monitoring by Fiber-Optic System," Journal of Lightwave Technology, 13, 1396-1406 (1995).
	CR	Bangs, "Immunological Applications of Microspheres," The Latex Course, Bangs Laboratories (April 1996)
	CS	"Fluorescent Microspheres (Tech. Note #19)," Bangs Laboratories (1997)

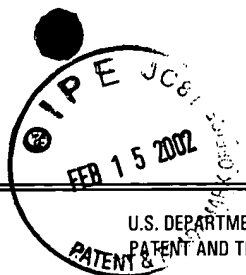
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PP	DA	5	6	9	0	8	9	4	11/25/97	Pinkel et al.	422	68.1	5/23/95
	DB	5	7	0	0	8	9	7	12/23/97	Klainer et al.	528	15	5/30/95
	DC	5	7	7	9	9	7	6	7/14/98	Leland et al.	422	52	6/5/95
	DD	5	9	3	9	0	2	1	8/17/99	Hansen et al.	422	55	1/23/97
	DE	5	9	6	1	9	2	3	10/5/99	Nova et al.	422	68.1	9/30/96
	DF	5	9	6	5	4	5	2	10/12/99	Kovacs	436	149	7/9/96
	DG	6	0	4	8	6	9	0	4/11/00	Heller et al.	435	6	5/14/97
	DH	6	0	9	0	5	4	5	7/18/00	Wohlstadter et al.	435	6	3/6/97
	DI	6	0	9	0	9	1	2	7/18/00	Lebl et al.	530	300	11/23/98
	DJ	6	2	0	0	7	3	7	3/13/01	Walt et al.	430	320	8/24/95
	DK												

## FOREIGN PATENT DOCUMENTS

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	DL													
	DM													
	DN													
	DO													
	DP													

## OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

PP	DQ	Egner, et al., "Tagging in combinatorial chemistry: the use of coloured and fluorescent beads," Chem. Commun. pp. 735-736 (1997)
PP	DR	Fulton, et al., "Advanced multiplexed analysis with the FlowMetrix system," Clinical Chemistry, vol. 43:9, pp. 1749-1756 (1997).
PP	DS	Scott et al., "Properties of fluorophores on solid phase resins; implications for screening, encoding and reaction monitoring," Bioorganic & Medicinal Chemistry Letters, 7:12, pp. 1567-1572 (1997).

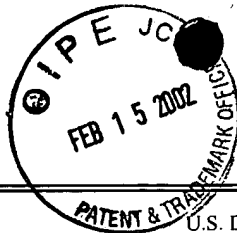
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	EA						
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							YES	NO
	EL							
	EM							
	EN							
	EO							
	EP							

## OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

PP	EQ	Healey et al., "Fiberoptic DNA sensor array capable of detecting point mutations," Analytical Biochemistry, vol. 251, pp. 270-279 (1997).
PP	ER	"Microsphere Selection Guide," Bangs Laboratories, Inc. (Fisher, IN) (September 1998)
	ES	


EXAMINER

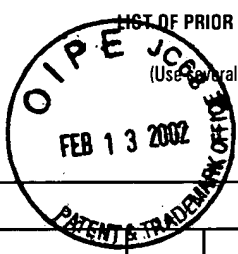
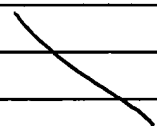
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<div style="text-align: center;">  </div> <p style="text-align: center;">BEST OF PRIOR ART CITED BY APPLICANT (Use several sheets if necessary)</p>				APPLICANT(S): SEUL, Michael and EBRIGHT, Richard				
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U.S. PATENT DOCUMENTS								
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PP ↓	AA	4 7 1 7 6 5 5	01/05/88	Fulwyler	435	7	10/15/84	
	AB	5 5 7 3 9 0 9	11/12/96	Singer et al.	435	6	05/20/94	
	AC	5 5 8 5 0 6 9	12/17/96	Zanzucchi et al.	422	100	11/10/94	
	AD	5 5 9 3 8 3 8	01/14/97	Zanzucchi et al.	435	6	05/19/95	
	AE	5 7 2 3 2 1 8	03/03/98	Haugland et al.	428	402	08/04/95	
	AF	5 7 4 4 3 0 5	04/28/98	Fodor et al.	435	6	04/06/95	
	AG	5 8 0 7 7 5 5	09/15/98	Ekins	436	518	07/25/95	
	AH	5 8 3 7 5 5 1	11/17/98	Ekins	436	518	12/23/94	
	AI	5 8 7 4 2 1 9	02/23/99	Rava et al.	435	6	04/09/96	
	AJ	5 9 8 9 8 3 5	11/23/99	Dunlay et al.	435	7.2	02/27/97	
	AK	6 0 2 3 5 4 0	02/08/00	Walt et al.	385	12	03/14/97	
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PP ↓	AL	9 5 1 2 8 0 8	05/11/95	PCT <i>WIPO</i>	G01N	21/00		X
	AM	9 6 0 7 9 1 7	03/14/96	PCT	G01N	35/00		X
	AN	9 7 4 0 3 8 3	10/30/97	PCT	G01N	33/543		X
	AO	9 8 0 6 0 0 7	02/12/98	PCT	G03F	7/00		X
	AP	9 8 5 3 3 0 0	11/26/98	PCT	G01N	21/00		X
OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)								
PP	AR	Micheletto et al., <i>langmuir</i> , vol. 11, 3333-3336 (1995)						
PP	AS	Nagayama et al., <i>Phase Transitions</i> , vol. 45, 185-203 (1993)						
	AT							
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<i>PP</i> ↓	BA	6 0 8 3 7 6 3	07/04/00	Balch	436	518	12/31/97
	BB	6 2 6 6 4 5 9	07/24/01	Walt et al.	385	12	11/29/99
	BC	3 9 8 2 1 8 2	09/21/76	Hogg	324	71	01/2/82
	BD	4 4 5 6 5 1 3	06/26/84	Kawai et al.	204	180	08/25/82
	BE	6 2 5 1 6 9 1	06/26/01	Seul	436	534	10/21/88
	BF						
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FOREIGN PATENT DOCUMENTS							
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<i>PP</i>	BM	9 9 1 9 5 1 5	04/22/99	<del>PCT</del> WIPO	C12Q	1/68	X
	BN						
	BO						
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OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.).							
	BR						
	BS						
	BT						
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